Dr. Aaron M. Altschul Special Assistant for International Nutrition Improvement International Agricultural Development Service United States Department of Agriculture Washington, D. C. 20250

Dear Dr. Altschul:

It was most gratifying to receive your letter of August 8 referring to my articles on "Science and Man". Letters like that are a great encouragement for me to keep my oar in this way.

Since I had already been very much impressed by the report of the PSAC subpanel of which you were a member, I was pleased but not greatly surprised at the relevance of the additional material you sent me, which I was very glad to read. In particular I was a little disappointed that the sub-panel did not stress even more vehemently the prospect for industrial production of synthetic amino acids.

Are you content with the responses that have been set in motion in India and in the Department of Agriculture? Are there some issues of technical policy that might be singled out for special emphasis, for example, in some future column that I might be able to write? Would these columns have any useful impact on people in important decision-making roles, or in informing their constituencies?

I am moved to write in this vein particularly because of my disappointment at the Senate committee's cut-back in the authorization for technical assistance in the foreign aid program. Unfortunately, I do not know enough of the specifics of the programs that will be pinched by such a cut-back to feel able to be very useful in any further discussion of the subject with congressmen. But if there were some way I could lend a hand I would like to be able to.

I am glad your enclosures pointed me to your book on "Proteins, Their Chemistry and Politics", and I will not waste any time in getting to read it.

Do you know whether it is possible to point to any really critical studies on the relatioship between amino acid deficiency and mental retardation? I don't really doubt the result, and I realize the methodological difficulties in a rigorous proof from clinical observation, but I wonder what you would regard as the most compelling documentation for it. I might perhaps make my question more pointed by asking if there is any insight into just which amino acid deficiency is the most critical in this context.

I am very much taken with your idea of nutrient pearls as the medium for supplementing grains. Do you think it would be hopeless to educate an illiterate population to look for such pearls as the sign of good food and to mark them distinctively accordingly, rather than trying to make them inconspicuous so that they will not be consciously rejected?

Just one final comment. I rather wish the expression "quality" had never been introduced for the idea of amino acid balance in proteins. It may be some of the source of the confusion that you complain about in the slow response of some nutrition policy makers to the idea of specific supplementation.

Sincerely yours,

Joshua Lederberg Professor of Genetics